

A NEW SPECIES OF *NAMA* (HYDROPHYLLACEAE) FROM NORTHEASTERN MÉXICO

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ABSTRACT

Nama hintoniorum *sp. nov.* is described from eastcentral Nuevo León, México. On the basis of vegetative and seed morphology, it is most closely similar to *N. bartlettii* and a group of other species primarily of northeastern México.

KEY WORDS: *Nama*, Hydrophyllaceae, México

Identification of recent collections made in northeastern México has revealed the following new species.

Nama hintoniorum Nesom, *sp. nov.* TYPE: MÉXICO. Nuevo León: Mpio. Aramberri, N of Aramberri, oak woods above river, 985 m, 1 Sep 1990, *Hinton et al.* 20564 (HOLOTYPE: TEX!; Isotype: MEXU!).

Namae bartlettii Standley similis sed habitu erecto, caulibus ad basim ligneis, inflorescentiis floribus numerosis, sepalis lanceolatis, et corollis rotatis differt.

Erect or ascending-erect, perennial herbs ca. 0.3 m tall, roots not seen, the stems winged, basally woody, minutely stipitate glandular, densely invested with spreading to ascending, eglandular hairs, these more or less of two size classes, the longer mostly 0.8-1.1 mm long, the shorter mostly 0.2-0.5 mm long. Leaves alternate, obovate, entire, plane or the margins narrowly revolute, 15-40 mm long, 4-12 mm wide at midstem, basally attenuate and narrowly decurrent 2-10 mm along the stem, stipitate glandular, the upper surface with two size classes of eglandular hairs, the larger with swollen bases, the hairs of more even length beneath. Flowers 4-12 in definite, terminal or axillary cymes, peduncles and pedicels filiform, the pedicels 2-5 mm long; calyx divided nearly to the base, not adnate to the ovary, the lobes herbaceous, linear lanceolate to linear

elliptic, 7-8 mm long (in fruit), glandular and coarsely hirsute; corollas purple, 6-7 mm long, broadly tubular-obconic, somewhat rotate; stamens included, unequally inserted, the filaments ca. 3 mm long, free portions longer than the winged adnate portions; styles ca. 2 mm long, the basal 0.2-0.3 mm adnate, free above. Capsule ovoid, 4-5 mm long, hispidulous. Seeds numerous, with deep alveoli in regularly aligned rows, the radial walls of the reticulum perforated.

Additional collection examined: MÉXICO. Nuevo León: Mpio. Zaragoza, along road from Rancho La Encantada to Zaragoza, pine-chaparral-palmetto association, 1800-1900 m, 4 Jul 1988, *Patterson 5948* (TEX).

The seeds of *Nama hintoniorum* (mounted and cleared in Hoyer's Solution, studied with a compound light microscope) have deeply alveolate-reticulate surfaces, the radial walls of the alveoli perforated, placing the new species in "Seed Group 3," as delimited by Chance & Bacon (1984). This group comprises *N. bartlettii* Standley, *N. palmeri* A. Gray ex Hemsl., *N. propinquum* Mort. & Hitchc., *N. marshii* (Standl.) I.M. Johnston, *N. stenocarpum* A. Gray, *N. biflorum* Choisy, and *N. jamaicense* L. (see comments in Bacon 1974 regarding *N. jamaicense* and *N. biflorum*; Bacon & Chance apparently regarded the two as conspecific). Among this group of species, *N. hintoniorum* is most similar to *N. bartlettii* in its duration, vestiture, leaf shape, pedicellate flowers, and seed morphology. *Nama bartlettii* differs in its prostrate-ascending habit, more herbaceous stems, fewer flowered inflorescences, tubular flowers (not rotate), and sepals that broaden toward the apex. The following key distinguishes *N. hintoniorum* from the other oblanceolate or spatulate leaved species of "Seed Group 3," all of which occur in northeastern México.

1. Perennial, erect; inflorescence 4-12 flowered, flowers on filiform pedicels; Nuevo León, México. *N. hintoniorum*
1. Annual or perennial, prostrate to ascending; inflorescence 1-2(-3) flowered or if more, the flowers sessile or nearly so. (2)
 2. Annual; leaves mostly spatulate; sepals lanceolate; flowers white. (4)
 2. Perennial; leaves mostly oblanceolate; sepals narrowly oblanceolate; flowers blue to purple. (3)
3. Leaves green (not sericeous), the pubescence spreading; flowers 2-3 per inflorescence, on filiform pedicels 10-14 mm long; Tamaulipas, México. *N. bartlettii*
3. Leaves sericeous, the pubescence mostly appressed; flowers 5-8 per inflorescence, sessile or on thick pedicels no more than 2 mm long; México (Coahuila, Nuevo León, Tamaulipas, San Luis Potosí, Zacatecas, Hidalgo). *N. palmeri*

4. Sepals (fruiting) 8-11 mm long, with a raised indurated keel on the proximal half; mature capsules 5-6 mm long; flowers solitary, on pedicels 1-3 (very rarely to 8) mm long; widespread in the southern U.S.A., México, West Indies, and South America. . *N. jamaicense*
4. Sepals (fruiting) 4-7 mm long, herbaceous; mature capsules 3.0-3.5 mm long; flowers (1-)2(-3), on peduncles and pedicels totaling 10-20 mm long; México (Nuevo León, Tamaulipas, and San Luis Potosí).
 *N. biflorum*

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